

## 6. REHABILITATION AND INSPECTION PROGRAM (RIP)

### 6.1 Overview of the Rehabilitation and Inspection Program

The U.S. Army Corps of Engineers has authority under Public Law (PL) 84-99 to supplement local efforts to repair flood control projects after they get damaged during a flood. There are many things that must be carefully balanced in carrying out this authority, such as the needs of the local community, sensitivity to the environment, the need to apply sound engineering judgment for the proper functioning of the FCW, and the need to provide proper stewardship of the taxpayers' dollars with which the Corps is entrusted. In light of all these competing interests, the Corps has developed a program called the Rehabilitation and Inspection Program (RIP), which specifically defines the types of projects that can be eligible for assistance, and specifies the ongoing for operation and maintenance requirements for the FCWs that qualify.



**Figure 6.1,** *Levee breach in Lynden, WA*

The principal reason the RIP exists is to ensure that flood control works continue to provide reliable protection, so that people's lives, communities, and improved property are protected from floods. The principal benefit of the RIP for you, the public sponsor, is that through this program you can receive federal assistance to help repair your FCW if it becomes damaged in a flood.



**Figure 6.2 and 6.3,** *Levee breaches along the Wabash River*

## **6.2 Projects that Qualify**

The Rehabilitation and Inspection Program covers certain levees, channels, floodwalls, flood control dams, retention basins, pump stations, and even some extremely large underground tunnels that have been built for flood control. However, there are certain exclusions to the types of projects that may enter the program. Projects that don't meet the basic criteria below are categorically excluded from the Rehabilitation and Inspection Program. For more information regarding the types of projects that are eligible for the RIP, refer to ER / EP 500-1-1, which can be found through the web-link provided in Chapter 1 of this manual.

### **a. Protecting People and Property**

The principal function of the project must be to protect people or property from floods. If the project was built or is primarily used for any other purpose, such as channel alignment, recreation, fish and wildlife, land reclamation, drainage, or to protect against land erosion or tidal inflows, then it's categorically excluded from admittance in the RIP.

### **b. Public Sponsor**

The project must have a non-federal public sponsor. The public sponsor is the public representative for the project, and represents the interests of any private landowners involved. For example, a levee may be constructed by a county, which would be the public sponsor, on private land for which the county has an easement from the property owners. A public sponsor is a legally constituted public body with full authority and capability to perform the terms of its agreement as the non-federal partner of the Corps for a project, able to pay damages, if necessary, in the event of its failure to perform. The public sponsor may be a state, county, city, town, Federally recognized Indian tribe or tribal organization, Alaska Native Corporation, or any political subpart of a state or group of states that has the legal and financial authority and capability to provide the necessary cash contributions, and the lands, easements, rights-of-way, relocations, and borrow and dredged or excavated materials disposal areas (LERRD's) necessary for the project. Finally, the public sponsor must be legally able to "hold and save" the federal government free from damages that could arise during post-flood rehabilitations or other work the federal government would undertake on the FCW. If it ever becomes necessary to rehabilitate the project, the sponsor will need to sign an agreement limiting the federal government's liability before the Corps will begin any work on the project.

### **c. Reliability**

The project must provide reliable flood protection, and it must be technically sound. To provide complete flood protection, the floodwall or levee must either make a complete a ring around the community, or tie into high ground on both the upstream and downstream ends of the project. From an engineering perspective, it has to be geotechnically stable and properly designed, and it must be well maintained.

**d. Project Completion Required**

The project must be completed. If it's still under construction, it can't enter the RIP.

**e. Minimum Level of Protection**

To be eligible to enter the RIP, agricultural levees (those protecting predominantly agricultural areas or agribusinesses) must be built to provide at least a 5-year level of protection. Urban levees (those protecting land with residences, public or commercial buildings, industrial facilities, etc.) must provide at least a 10-year level of protection. Drainage channels that were designed and constructed for flood control are required to have capacity for a 10 year flood event and must additionally provide drainage to an area 1.5 square miles or greater and have a drainage capacity greater than 800 cfs.

To clarify some of this terminology, a 5-year flood event means that there's a twenty percent chance of this level of flooding every year, not that the flooding actually happens every five years. This means that if an agricultural levee, for example, has a statistical probability of being overtopped more than once every five years, it is categorically ineligible to be in the RIP.

Drainage structures that were specifically constructed for flood control as components of a larger FCW system (such as ponding areas or channels carrying water from the ponding area up to and through a levee) are considered to be components of the overall FCW system. They would be evaluated for inclusion in the RIP and potential rehabilitation with the remainder of the FCW. However, natural or modified streams within a levee'd area, including drainage swales such as roadside ditches, are not considered to be components of flood control works and would not be included in the RIP.

**f. Primary Levee Requirement**

In the case of a levee project, the levee must be a primary levee. Secondary levees are not eligible to enter the rehabilitation program. Exceptions to this policy may be granted if the secondary levee was designed to protect human life or the levee is a major component of the primary levee system and is necessary to assure the flood control protection of the total system.

**g. Construction Compliance**

The project must have been constructed in accordance with all applicable federal, state and local permits, codes, ordinances, and applicable laws. This includes flood plain management ordinances in counties where no flood insurance programs exist.